

CLAIMS

What is claimed is:

- 5      1.    A method for authenticating a document,  
         comprising the steps of:  
             generating a document key by examining one or  
         more physical attributes of a physical media that  
         underlies the document;  
10           imparting an original image onto the physical  
         media such that the original image enables recovery  
         of the document key.
2.    The method of claim 1, wherein the step of  
15           imparting comprises the steps of:  
             generating a digital signature using the  
         document key and a private key that corresponds to  
         the document;  
             encoding the digital signature into the original  
20           image.
3.    The method of claim 1, wherein the step of  
         imparting comprises the step of printing the document  
         key on the physical media {as the original image}.
- 25           4.    The method of claim 1, further comprising the  
         step of recording the document key along with a  
         description of the document.
- 30           5.    The method of claim 1, further comprising the  
         step of verifying the document by performing the  
         steps of:

obtaining a recovered document key from the original image;

6. The method of claim 1, wherein the step of  
generating a document key comprises the step of  
10 examining paper fiber patterns in the physical media.

8. The method of claim 1, wherein the step of imparting comprises the steps of:

encoding the digital signature into the original image.

10. The method of claim 1, wherein the step of  
generating a document key comprises the step of  
30 examining density differences of the physical media.

11. The method of claim 1, wherein the step of generating a document key comprises the step of

examining a unique pattern imparted in the physical media.

13. The method of claim 11, wherein the step of  
10 examining a unique pattern comprises the step of  
examining a pattern of UV ink in the physical media.

14. The method of claim 11, wherein the step of  
examining a unique pattern comprises the step of  
15 examining a set of predetermined shapes printed in  
predetermined positions on the physical media.

15. The method of claim 14, further comprising the  
steps of measuring the predetermined positions and  
20 encoding the predetermined in the document key.

16. An apparatus for authenticating a document,  
comprising:

imager that generates a set of pixel data values  
25 in response to a document;

document key generator that generates a document  
key by examining the pixel data values to detect one  
or more physical attributes of a physical media that  
underlies the document thereby enabling the document  
30 key to be imparted in an original image onto the  
document.

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    imager that generates a set of pixel data values
in response to a document;

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10 obtained from the document.